

#18.

Hawaiian Explorations.

D<sup>r</sup> 4071-4109.

H<sup>y</sup> 4598-4608.

July 19<sup>th</sup> - 24<sup>th</sup>, 1902.

Text #4. 4598.  
" Dr. 4071.

$$\begin{array}{r} 4109 \\ 3790 \\ \hline 319 \end{array}$$

12.21-30  
11.40  
41.30

32.45  
8.30  
24.15

$$\begin{array}{r} 3-79 \\ 2-43 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 3950 - \cancel{160} \quad 170 \\ 75 - \quad \quad \quad 72 \\ \hline 4000 - 147 \quad 174 \end{array}$$

$$\begin{array}{r} 3987 \\ 75 \\ 12 \text{ } 11 \\ \hline 87 \end{array}$$

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

### SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

*Hutchinson*  
 No. *4071* Date *July 19<sup>th</sup>*  
*Tanner* Machine. Reel.  
 Turns *50* Cor. + *2* Depth *52 fms*  
 Shot or lead *36 lbs*  
 Bottom *fm co + vol S For*  
 Bottom temperature *73*  
 No. of thermometer *98236* Cor. *-0.1*  
 Corrected temperature *72.9*  
 Air *81* Surface *76* Drift *6/10'*  
 Trawl or dredge *8' Tanner ind apron*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11-59.20</i>	<i>12-00.40</i>	0	<i>12-06.15</i>	<i>35.15</i>
<i>59.50</i>	<i>59.55</i>	<del>100</del> 90	<i>10.00</i>	<i>31.10</i>
		200		
		300	<i>21</i>	
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

*also marks end  
 of  
 No. 4070.*

NE. Coast Maui, } 8 78° 30' E. 16 8/10'  
 Puniaua Point, }

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
496	3600	12
30	3700	
446	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Next Hy.	4598.		
50	"	Di. 4071.		
100				
200	8' Tanner -			
300	1 tetrodon;	many of 2 sps		
400	platophrys;	many sponges -		
500	1 very large & massive;			
600	1 hermit;	1 shrimp; several		
700	hydroids;	many siphirans -		
800				
900				
1000				

REMARKS:

No.

4072

Date

July 17

Tanner

Machine.

Reel.

Turns 54 Cor. +

2

Depth

56 fms

Shot or lead

36 lbs.

Bottom

crs. lo. S. For.

Bottom temperature

73.5-0

No. of thermometer

98236

Cor.

-0.1

Corrected temperature

73.4

Air

81

Surface

76

Drift

N 48° W  
2 10'

Trawl or dredge

8' Tanner with Apron

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

12-36.25

38<sup>50</sup>

0

37.00

37.05

90

Marks used if

No 4071

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

## DREDGE ROPE.

DOWN.

UP.

12-42.50

13 =

47.10

1-08.25

21<sup>30</sup>

Puniawa Point, S 74° 30' E., 7 1/10'

OK  
H.C.  
12

496  
54  
—  
442

12

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	8' Tanner			
50	1 lq sponge; sev'l sps. small			
100	sponges; 2 sps polyzoa; about			
200	3 sps hydroids; 1 gorgonian;			
300	1 starfish; ophiurans - many in			
400	sponges; 1 fanellinus; 1 hermit;			
500	1 crab; sev'l of 2 sps platophrys;			
600	1 antigonia; 1 compound ascidian.			
700				
800				
900				
1000				

REMARKS:

*Hutchinson*  
 No. *4073* Date *19<sup>th</sup> July*  
*Tanner* Machine. #1 Reel. *Havy.*  
 Turns *66* Cor. + *3* Depth *69 f*  
 Shot or lead *36 lbs.*  
 Bottom *co. bo S. For.*  
 Bottom temperature *72°*  
 No. of thermometer *98236* Cor. *-0.1*  
 Corrected temperature *71.9* *EN 48° W*  
 Air *84* Surface *76* Drift *8/10*  
 Trawl or dredge *Tanner with apron*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1-15.00</i>	<i>17.00</i>	0	<i>1-20.50</i>	<i>54.10</i>
<i>15.30</i>	<i>15.35</i>	100	<i>26.15</i>	<i>50.15</i>
<i>Marks end of</i>	<i>200</i>	120	<i>27.25</i>	<i>49.20</i>
<i>4072</i>		300		
		400	<i>22</i>	<i>m</i>
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

37208, 7<sup>8</sup>/<sub>10</sub>'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
496	3500	12
66	3600	
430	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	8' Tanner			
50	1 sponge, 1 flatfish;			
100	1 fish, 1 squid;			
200	3 mackerel.			
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *5* 4074 Date *19 July*

*Tanner* Machine. Reel.

Turns *75* Cor. + *3* Depth *78 f*

Shot or lead *36 lb.*

Bottom *co. S. For.*

Bottom temperature *71*

No. of thermometer *95236* Cor. *-0.2*

Corrected temperature *70.8* (*N 51° 34'*)

Air *81* Surface *76* Drift *9/1*

Trawl or dredge *8' Tanner with*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1-55.50</i>	<i>58.15</i>	0	<i>2-01.00</i>	<i>35.15</i>
<i>56.40</i>	<i>56.45</i>	100	<i>05.20</i>	<i>31.10</i>
		<i>150</i>	<i>07.10</i>	
<i>2-02.22</i>	<i>und if</i>	<i>175</i>	<i>21.45</i>	<i>28.5</i>
<i>50 4073</i>		400		
		500	<i>21</i>	
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

8700 E., 8<sup>5</sup>/<sub>10</sub>'

616  
8/10  
8/11

496  
75  
—  
421

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	8' Tinner			
50	2 Photophaps; 1000 fms.			
100	1 stop.			
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

*Station*  
 No. *4598* Date *July 19<sup>th</sup>*  
*Tanner* Machine. — Reel.  
 Turns *82* Cor. + *3* Depth *85 f*  
 Shot or lead *36 lbs.*  
 Bottom *crs. m. S. Fgy.*  
 Bottom temperature *66.7*  
 No. of thermometer *98236* Cor. *-0.2*  
 Corrected temperature *66.5*  
 Air *81* Surface *76* Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>2.36.50</i>	<i>39.40</i>	0		
<i>37.25</i>	<i>37.30</i>	100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Station 8653, 2, 75

5271

496  
82  
—  
414

12

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

62.8

17

No. *133* Date *Aug 29*  
*Knap* Machine. Reel. *1*  
 Turns *42* Cor. + *4* Depth *46*  
 Shot or lead *36*  
 Bottom *gy. sh.*  
 Bottom temperature *72.5*  
 No. of thermometer *91226* Cor. - *0.1*  
 Corrected temperature *72.4* (*N 27° W*)  
 Air *77* Surface *1* Drift *1.0*  
 Trawl or dredge *8 ft. beam trawl*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		0	<i>8:15</i>	<i>4:00</i>
		100	<i>18:30</i>	<i>3:50</i>
		200		
		300	<i>21</i>	<i>m</i>
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Pinnacles Point 87° 30' E., 6.0'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	8' Tanner -			
50	1 starfish; 2 sp. ophiurans;			
100	sea of 2 sp. polychaetes;			
200	1 porcupine; 2 antipatharians			
300	corals; 1 sponge; polychaetes			
400	sponges; small alpheid crust-			
500	worms in sponge -			
600	<u>2</u>			
700				
800				
900				
1000				

REMARKS:

No.

Date

Machine.

Reel.

Turns

Cor. +

Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS

## DREDGE ROPE.

DOWN.

UP.

50

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Ship marks  
up of  
57 4070

Station 11, 1872030 E., 67/10

OK  
HLS

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	81°			
50	1			
100	plutei stage; 2			
200	ophiurans;			
300	2 spec. polychaetes; little hydroids;			
400	Compound hydroids;			
500	(Kaliactis-like) had several			
600	gastropod shells in stomach.			
700				
800				
900				
1000				

REMARKS:

No. *1111* Date *21 July 02*  
 Machine. Reel.  
 Turns *65* Cor. + *3* Depth *68*  
 Shot or lead *25 lb*  
 Bottom *gy. m. s. bk. gy. s.*  
 Bottom temperature  
 No. of thermometer *9856* Cor. *-0.2*  
 Corrected temperature *68.8*  
 Air *78* Surface *76* Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
		<i>65</i>		
		100		
		200		
		300		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Puniawa Pt, 6612 E. 6671

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No.

Date

Machine.

Reel.

Turns

Cor. +

Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor. -0.2

Corrected temperature

Air

Surface

Drift

Trawl or dredge

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.

UP.

TURNS

DOWN.

UP.

0

90

100

125

150

175

200

225

250

275

300

325

350

375

400

425

450

475

500

525

550

575

600

625

650

675

700

725

750

775

800

825

850

875

900

925

950

975

1000

1025

1050

1075

1100

1125

1150

1175

1200

1225

1250

1275

1300

1325

1350

1375

1400

1425

1450

1475

1500

20

Station 11, 045° 45' 6", 6' 10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	10'	Black		
50		Many of 3 sp. starfish,		
100		1 urchin, 1 starfish,		
200		Many of 11 sp. starfish in small		
300		starfish, 2 sp. starfish, many		
400		2 3 sp. anemones, 2 gastropods,		
500		1 coral: 1 sp. of 2 sp. anemones,		
600		3 sp. starfish, 2 sp. of		
700		plate starfish, 2 sp. starfish,		
800		2 starfish, 1 antipodaria,		
900		1 nudibranch.		
1000				

REMARKS:

4

No. 409 Date July 22  
 Machine. 1 Recl. 1  
 Turns 16 Cor. + 10 Depth 106 fms  
 Shot or lead  
 Bottom gy. S. G. 6/9  
 Bottom temperature  
 No. of thermometer 98236 Cor. -0.2  
 Corrected temperature 66.7 (N61°E)  
 Air 79 Surface 76 Drift 1/2 mi  
 Trawl or dredge 10 ft. Dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
10:30.40	10.36.20	0	10.41.50	11.19.00
33.35	35.20	100	41.30	11.12.30
		200	51.50	
		300	20	
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

340° 6. 6' 10'

6100  
340° 6. 6' 10'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Blank			
50		Little pelicans; hydroids;		
100		and opheuroidea		
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Drifted with the surface  
with high surface  
and low barometer, some  
surface drift in the

No. 4079

Date 21

Machine.

Reel.

Turns 130

Cor. +

Depth 143

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor. -

Corrected temperature

Air

Surface

Drift

Trawl or dredge

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

11:20.30 11:24.40  
21.20 23.40  
21.30 23.00

0  
100  
130

11:30.00 11:30.00  
27.00 11.20  
28.00 11.20

Marks and of  
1. 405.

300  
315  
320-400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400

29.00  
30.00  
31.00  
32.00

831030' 8., 6.0'

65  
3-24

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Black net contents			
50	1. penaeid; swt. crabs; Clapton			
100	astroids; 11 sps. starfish; many			
200	12 sps. 3 sps. sponges; 10 sps. polych.			
300	1 nemertean; 1 octopus; swt.			
400	gastropods; swt. dead solitary			
500	corals; swt. brachiopods; few			
600	2 sps. Crabs; few mollusks; 2 sps.			
700	penaeulids; few hydroids;			
800	2 sps. pteropods; 1 Pteropod;			
900	2 synodus; 2 scorpion			
1000	1 mallophaga; 1 sp. fish (B).			

REMARKS:

6

No. *2017*, Date *2 Feb 12*

*Sigsbee* Machine. / Reel *2017*

Turns *162* Cor. + *16* Depth *178 fms*

~~Shot or lead~~ *36 Lbs.*

Bottom *gy. S. For.*

Bottom temperature *56.7*

No. of thermometer *98350* Cor. *-0.3*

Corrected temperature *56.4* *N/30*

Air *79°* Surface *76°* Drift *1'*

Trawl or dredge *10' Blake*

SOUNDING WIRE.

DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>12.17.50</i>	<i>22.00</i>	0	<i>12.30.00</i>	<i>22.00</i>
<i>12.18.00</i>	<i>22.00</i>	100	<i>12.30.10</i>	<i>22.00</i>
<i>12.18.10</i>	<i>21.50</i>	162	<i>12.30.20</i>	<i>22.00</i>
		200	<i>12.30.30</i>	<i>22.00</i>
		300	<i>12.30.40</i>	<i>22.00</i>
<i>12.18.20</i>		400	<i>12.30.50</i>	<i>22.00</i>
		500		
<i>12.18.30</i>		600	<i>12.31.00</i>	<i>22.00</i>
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

23° 8', 6' 10'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25		Catch		
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *1581* Date *21 Oct 1901*

Machine. / Reel. *Hand*

Turns *184* Cor. + *18* Depth *202 fms.*

Shot or lead *36 Lbs.*

Bottom *gy S. For.*

Bottom temperature *52. -*

No. of thermometer *98212* Cor. *-0.3*

Corrected temperature *51.7* (*51.7*)

Air *80° -* Surface *76° -* Drift *1 1/10'*

Trawl or dredge *10' Dredge*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

*1.22.10* *1.22.45*

*1.29. -* *1.31.40*

*1.30.50* *1.30.00*

*Also mark end*

*Dr. Hobs.*

0

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

*1.42.45* *2.34. -*

*1.45. -* *2.30.30*

*1.49. -* *2.25. -*

*1.53. -* *2.20.00*

*1.57.15* *2.14.46*

*2.01. -* *2.10.00*

*2.05. -* *2.05. -*

*2.09. -* *2.00. -*

817° 45' E., 7<sup>6</sup>/<sub>10</sub>'

91C

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

18  
202

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25		Catch -		
50		5 peristoma; 4		
100		5 scapha; 1		
200		1 triglophus; many		
300		many scapha; 1		
400		peristoma; 1		
500		3 kinds scapha; 1		
600		scapha; 2 nudibranchs; 2		
700		scapha; many		
800		scapha; 1		
900		scapha; 1		
1000				

REMARKS:

No. *Δ. 4082*. Date *21 July 31*  
*Sigsbee* Machine. / Reel. *(1)*  
 Turns *200* Cor. + *20* Depth *220*  
 Shot or lead *36 Lbs.*  
 Bottom *gy S.*  
 Bottom temperature *49.0*  
 No. of thermometer *98226* Cor. *-0.2*  
 Corrected temperature *48.8* (*MC*)  
 Air *81°* - Surface *76°* - Drift *1 1/10'*  
 Trawl or dredge *10' Sigsbee 60 ft. beam trawl*

SOUNDING WIRE.

DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>2.43.20</i>	<i>2.48.15</i>	0	<i>4.55.-</i>	<i>3.55.-</i>
<i>44.15</i>	<i>47.05</i>	100	<i>59.40</i>	<i>50.25</i>
<i>2.45.15</i>	<i>2.46.05</i>	200	<i>3.03.50</i>	<i>46.10</i>
		300	<i>08.20</i>	<i>41.30</i>
		400	<i>12.55</i>	<i>37.45</i>
		<i>450</i>	<i>3.12.40</i>	<i>3.34.40</i>
		500		
		600	<i>21 min.</i>	
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Pumpkin Patch, S 110 30' E, 8 1/8'

all  
H.P.

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

810

205

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25		Catch		
50		3 peristomes; 1 myctophan;		
100		2 flounders; 2 chelodactylus;		
200		1 coelacanth; 2 penaeids; 2 other		
300		coelacanth; many myctophans; 1 crab;		
400		2 sp. shrimp; 2 sp. barnacles on		
500		urchin spines; 2 sp. fish;		
600		2 sp. decapods; 2 pinnatules;		
700		1 squid; many of 6 sp. starfish;		
800		1 urchin; fragments of spatangoid;		
900		1 pelagic fish;		
1000				

REMARKS:

No. *Δ-4083*. Date *21 July '02*.

Machine. / Reel. *None*.

Turns *216* Cor. + *22* Depth *238 fms.*

Shot or lead *36 Lbs.*

Bottom *gy S.*

Bottom temperature

No. of thermometer } *None* Cor.

Corrected temperature

Air *84°* - Surface *74°* Drift } *12°*

Trawl or dredge *10' Blake*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>3.50.00</i>	<i>4.01.-</i>	0	<i>4-10.20</i>	<i>5.13.10</i>
<i>51.30</i>	<i>4.00.05</i>	100	<i>14.50</i>	<i>59.30</i>
<i>52.20</i>	<i>59.-</i>	200	<i>15.00</i>	<i>56.05</i>
<i>53.25</i>	<i>58.00</i>	<i>216</i>	<i>23.25</i>	<i>51.50</i>
		<i>300</i>	<i>37.30</i>	<i>47.5</i>
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Puniauwa Pt, 84°15' E, 8<sup>8</sup>/<sub>10</sub>'

6 ft  
10 ft  
15 ft

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

216  
22  
238

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25		Catch		
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4084* Date *July 31<sup>st</sup>*Machine. *Sigsbee* Reel. *Hand*Turns *230* Cor. + *23* Depth *253 fms*~~Shot or lead~~ *36 lbs*Bottom *fm gy S.*Bottom temperature *46.90*No. of thermometer *98236* Cor. *-0.2*Corrected temperature *46.7* *(N 16° E)*Air *50* Surface *76* Drift *1/15*Trawl or dredge *10' Blake, 60' Trawl*

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

*5:05.00* *11.25*

0

*5:20.30* *13.40**10.20*

100

*16.00* *09.55**07.25* *07.20*

200

*28.40* *16.05**07.50* *05.50*

300

*36.50* *6:01.20**Wrecked and lost*

400

*36.50* *57.00**4083*

500

*20 m*

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Latitude 10° 30' 15" E, 10° 10'

5  
H 100  
4

230  
23  
253

4310  
230  
4080

205

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25		Catch		
50		Microcrurus; Melanostoma		
100		5 sp mollusks; 2 sp crabs;		
200		3 Munida; 2 sp shrimp;		
300		1 sp. Echinoderm; and 1 sp.		
400		sp. Mollusk; 2 sp. worms;		
500		many Echinoderms; 1 sp.		
600				
700				
800				
900				
1000				

REMARKS:

No. *H085* Date *July 21/95*Machine. *Sigsbee*Reel. *Ch. 1*Turns *243* Cor. + *24* Depth *267 fms*Shot or lead *36*Bottom *S. Sh.*Bottom temperature *75*No. of thermometer *98336*Cor. *-0.1*Corrected temperature *74.9*Air *81*Surface *76*Drift *2 N 20 E*Trawl or dredge *10' Blake 60" S. N. H. 7*

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

*6-15.20* *23.20**16.05* *22.15**17.05* *21.10**18.30* *20.45**Marked end of**No 4084**Surface Net**6.55* *7.09**1 haul* *14 m*

0

100

200

243

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

*6-31.40* *25.30**32.15* *24.45**33.05* *20.20**44.00* *15.30**49.00* *10.05**51*

62° 5', 10 1/2'

500  
1000  
1500  
2000  
2500  
3000  
3500  
4000

4310  
243  
4067

205  
131  
24

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Slight ripple from E. to E.			
50	Slight ripple from E. to E.			
100	Slight ripple from E. to E.			
200				
300	Drift net torn -			
400	Many small fish -			
500	Many small fish -			
600	Many small fish -			
700	Many small fish -			
800				
900	Black; many small fish -			
1000	Black; many small fish -			

REMARKS:

few starfish, few sponges, 1 crab,  
few of 2 sp. shrimp, few murex,  
2 pteropods, many dactyls, few  
piddypods, anemones, 1 peristome  
lion, many others, many by  
ocellus, white, few of 2 sp. of  
murex, 1 pteropod -

12

No. *4086* Date *July 21<sup>st</sup>*  
*Sigsbee* Machine *#1* Reel *Heavy*  
 Turns *257* Cor. + *24* Depth *283 fms*  
 Shot or lead *36 lbs*  
 Bottom *S. Sh.*

Bottom temperature *144.8*  
 No. of thermometer *95236* Cor. - *0.2*  
 Corrected temperature *44.6*  
 Air *75* Surface *76* Drift *1.5*  
 Trawl or dredge *10' Blake 60' Tann Net*

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

<i>7-31.30</i>	<i>38.10</i>	0	<i>7-40.00</i>	<i>8.40.20</i>
<i>32.15</i>	<i>37.15</i>	100	<i>48.10</i>	<i>8.10</i>
<i>33.05</i>	<i>36.25</i>	200	<i>12.4</i>	<i>38.40</i>
<i>33.40</i>	<i>35.25</i>	<i>257</i>	<i>55.40</i>	<i>38.10</i>
		<del>300</del>	<i>8.00.20</i>	<i>38.15</i>
		400	<i>07.30</i>	<i>38.40</i>
<i>Marked out of</i>		<del>450</del>		
<i>No 4085</i>		600		
		700		
<i>Surface Net</i>		800		
<i>7.46</i>	<i>8-23</i>	<del>900</del>		
<i>1-</i>	<i>36 m</i>	1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Unawa Point, 11/15/10

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

257  
26  
283

4310 205  
257 179  
4053 26  
283

# SERIAL TEMPERATURES

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

## REMARKS:

Surf-milt (form) = 1st  
Copepods, few developed larvae,  
Siphonaria, exocoelous, flatfish;  
few other small fishes -

13

No. *244* Date *July 1902*  
Machine. *Lucas* Reel. *Lucas*  
Turns *28* Cor. + *2.8* Depth *306 fms*

Shot or lead *35*  
Bottom *gy. m. - 1/4 - 0*  
Bottom temperature *43.8*  
No. of thermometer *18250* Cor. *-0.2*  
Corrected temperature *43.6*  
Air *77* Surface *76* Drift *1.5*  
Trawl or dredge *10' Blake, beam trawl*

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

<i>17.30</i>	<i>7.30</i>	0	<i>17.30</i>	<i>10-01-</i>
<i>18.10</i>	<i>7.20</i>	100	<i>17.40</i>	<i>10.10</i>
<i>18.20</i>	<i>7.10</i>	200	<i>17.50</i>	<i>10.20</i>
<i>17.30</i>	<i>7.00</i>	<i>280</i>	<i>08.30</i>	<i>47.30</i>
		400	<i>13.00</i>	<i>43.20</i>
		500	<i>18.30</i>	<i>9.39.20</i>
		600		
		700	<i>21</i>	<i>m</i>
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

*Unf. m. of 1/2 m. p.m.*  
*1 haul - 43 =*

N.E. Approach to Pailolo Channel -  
Mokuhooniki Islet, 16° 45' N, 157° 15' W

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	21.5			
50	21.5			
100	21.5			
200	21.5			
300	21.5			
400	21.5			
500	Black			
600	Many g. sp. macrurus;			
700	4 starfish, 2 sp. Urchins;			
800	Anemone, ascidian, holothurian;			
900	soft gastropods; squid; 1 starfish			
1000				

Surface 3 fishes; 1 flower crab

## REMARKS:

14

No. *278* Date *25 July 1902*

Machine. *1* Reel. *4*

Turns *278* Cor. + *28* Depth *306 fms*

Shot or lead *36 lb*

Bottom *gy. sh.*

Bottom temperature *21.4*

No. of thermometer *98236* Cor. *-0.2*

Corrected temperature *43.8*

Air *76* Surface *75* Drift *1.5*

Trawl or dredge *10' Blake*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>10.15.30</i>	<i>10.12.00</i>	0	<i>10.11.40</i>	<i>11.20.00</i>
<i>06.30</i>	<i>10.00</i>	100	<i>25.10</i>	<i>20.00</i>
<i>07.30</i>	<i>09.00</i>	200	<i>27.00</i>	<i>16.00</i>
<i>08.30</i>	<i>08.00</i>	300	<i>31.00</i>	<i>11.50</i>
<i>09.30</i>	<i>06.30</i>	400	<i>36.10</i>	<i>06.30</i>
<i>10.20</i>	<i>05.00</i>	500	<i>39.30</i>	<i>00.30</i>
<i>10.20</i>	<i>04.00</i>	600	<i>21.20</i>	
<i>10.20</i>	<i>03.00</i>	700		
<i>10.20</i>	<i>02.00</i>	800		
<i>10.20</i>	<i>01.00</i>	900		
<i>1 haul</i>	<i>40 m</i>	1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhooniki Slet, 0 11° 30' N., 157° 10' W.

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
4310 205	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	11.1	42	0.0	11.1
50	10.8	43	0.0	10.8
100	10.5	44	0.0	10.5
200	10.2	45	0.0	10.2
300	10.0	46	0.0	10.0
400	9.8	47	0.0	9.8
500	9.6	48	0.0	9.6
600	9.4	49	0.0	9.4
700	9.2	50	0.0	9.2
800	9.0	51	0.0	9.0
900	8.8	52	0.0	8.8
1000	8.6	53	0.0	8.6

REMARKS:

Surface net = 2 sp. fish -  
1 a ghost fish -

No. *1004*

Date *21 July 1901*

Machine. *1*

Reel. *1004*

Turns *250*

Cor. + *26*

Depth *277*

Shot or lead *36*

Bottom *fine gy. s. & sh.*

Bottom temperature

No. of thermometer *78236*

Cor. *-0.2*

Corrected temperature *43.8*

Air *76*

Surface *71.5*

Drift *1.1*

Trawl or dredge *30' beam trawl*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

*11.35.00*  
*2.45.00*  
*2.55.00*  
*3.05.00*

0  
100  
200  
300

*12.42.00*  
*43.20*  
*48.00*  
*52.00*

400  
500  
600  
700  
800  
900  
1000  
1100  
1200  
1300  
1400  
1500  
1600  
1700  
1800  
1900  
2000  
2100  
2200  
2300  
2400

*56.30*  
*12.01.30*  
*12.21.30*  
*20 min.*

*11.40* *12.21.30*

*1 hour 41 min.*

*100 fms. No. 1*

Mokuhooniki Islet, 87° 16' W, 20° 31' N

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
4310 201	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	<p>Surface water          1000 fathoms          2000 fathoms          3000 fathoms          4000 fathoms          5000 fathoms          6000 fathoms          7000 fathoms          8000 fathoms          9000 fathoms          10000 fathoms</p>			
50				
100				
200				
300	<p>Bottom = 5000 fathoms</p>			
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

007

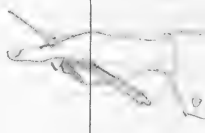
No. *Δ. 4090* Date *22 July 31.*  
*Sigsbee* Machine. / Reel. *Waring*  
 Turns *276* Cor. + *28* Depth *304 fms.*  
 Shot or lead *36 lbs.*  
 Bottom *gy. s. M. d.*  
 Bottom temperature *44.0*  
 No. of thermometer *9520* Cor. *-0.2*  
 Corrected temperature *43.8* (*N 14° W*)  
 Air *-6°* Surface *52°* Drift *1 1/2*  
 Trawl or dredge *10' Blake, beam trawl.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>12.50.30</i>	<i>12.57.30</i>	0	<i>1.02. -</i>	<i>2.02.10</i>
<i>51.30</i>	<i>56.30</i>	100	<i>07.30</i>	<i>2.02.45</i>
<i>52.15</i>	<i>55.30</i>	200	<i>12. -</i>	<i>58.50</i>
<i>12.53.00</i>	<i>12.54.20</i>	<i>276</i>	<i>16. -</i>	<i>59.00</i>
		<del>300</del>		
		400	<i>22. -</i>	<i>50.15</i>
		500	<i>1.25. -</i>	<i>1.45.35</i>
		600		
		700	<i>20 min.</i>	
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
<i>1.02.30 - 1.04.10</i>		1500		
		1600		
<i>1 haul - 44 min.</i>		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

*Also marks and*

*Δ. 4089.*

*Surface Net*



Nokuhoniki Islet, 871° 15' W., 20° 10'

OK J.C.D.             276 28 <u>304</u>		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
		3400	
		3500	
		3600	
		3700	
		3800	
		3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Clear and cloudy, and pleasant. Brilliant moon. Light E. N. E. breeze. S. north breeze. A gentle breeze with drifting rain at end of station.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

At anchor (12.0) North.

No. *1100* Date *Feb 11 1881*  
*Sigsbee* Machine. / Reel. *(Faber)*  
 Turns *210* Cor. + *28* Depth *238 fms*

Shot or lead *36 Lbs.*

Bottom *gm gy S*

Bottom temperature *44.*

No. of thermometer *98236.* Cor. *-0.2*

Corrected temperature *43.8*

Air *77°* - Surface *76°* - Drift *1 1/2*

Trawl or dredge *10' Blake, 60 lbs tail weight.*

*Am* SOUNDING WIRE.

DOWN.

UP.

*2. 26.35* *2. 32.05*  
*27.30* *32.05*  
*28.20* *31.05*  
*2. 29.20* *2. 30.05*

TURNS.

100

200

300

400

450

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

DREDGE ROPE.

DOWN.

UP.

*2. 42. -* *3. 39.40*  
*45.15* *34.50*  
*49.30* *30.05*  
*53. -* *25.40*  
*57.05* *21.45*  
*2. 59.20* *3. 19.15*

*20 min.*

*After making out*

*2. 40. 40*

*Surface Trawl*

*2. 53.00 - 3. 19.15*

*1 haul. 36 min.*

Mokuhooniki Islet. 166° 15' W., 21 9/10'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
4210	3700	205
280	3800	
29	3900	
<u>708</u>	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Clear and cloudy, becoming cloudy and gentle rain. Noon light. Light to gentle breeze from E. N. E. Smooth sea.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Dr. Course (P.S.C.), North.

No. *Dr. 4092*. Date *23 July 02*.  
*Sigsbee* Machine. / Reel *Heavy*.  
 Turns *278* Cor. + *28* Depth *306 fms.*  
~~Shot or lead~~ *36 lbs.*  
 Bottom *gy. m. 94.8*  
 Bottom temperature *44.8*  
 No. of thermometer *98236* Cor. *-0.2*  
 Corrected temperature *43.8* (*N 140 W*)  
 Air *76°* - Surface *76°* - Drift *19/10'*  
 Trawl or dredge *10' Blake, 60 lbs. Cat weight.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>4.10.15</i>	<i>12.15</i>	0	<i>4.15.20</i>	<i>17.30</i>
<i>5.50</i>	<i>11.30</i>	100	<i>22.40</i>	<i>13.05</i>
<i>06.30</i>	<i>09.55</i>	200	<i>26.25</i>	<i>08.45</i>
<i>07.20</i>	<i>09.30</i>	<i>278</i>	<i>30.00</i>	<i>04.20</i>
		400	<i>33.30</i>	<i>5.00.30</i>
		<i>452</i>	<i>35.10</i>	<i>5.18.30</i>
		600		
<i>Also made out</i>		700	<i>23 min</i>	
<i>Dr. 4091.</i>		800		
		900		
		1000		
<i>Super Net.</i>		1100		
<i>4.21.20</i>	<i>4.55</i>	1200		
		1300		
<i>haul 34 min</i>		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhooniki Islet, 161° 15' W., 21 1/10'

OK  
500  
2

278  
28  
306

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25	Overcast to Cloudy. Light breeze E. N. E. Sea smooth.			
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Dr. Course (P.S.C.), Dr.

No. *4600* Date *22 Feb '02*  
*Sigsbee* Machine. / Reel. / *Navy*.  
 Turns *280* Cor. + *28* Depth *308 fms.*  
 Shot or lead *36*  
 Bottom *gy. s. brk. sh.*  
 Bottom temperature *44*  
 No. of thermometer *98256* Cor. *-0.2*  
 Corrected temperature *43.8*  
 Air *76* Surface *76* Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>5- 21.20</i>	<i>27.20</i>	0		
<i>22.00</i>	<i>26.15</i>	100		
<i>22.45</i>	<i>25.10</i>	200		
<i>23.30</i>	<i>24.15</i>	<i>280</i> 300		
		400		
		500		
		600		
		700		
<i>Also made out</i>		800		
<i>Dr. 4602.</i>		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhooniki blkt. 8.57-50 N. 22 1/2

510  
310

4310

205

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Cat Log 67.8

5

No. 4093

Date

July 22

Machine.

Reel.

Turns 1078

Cor. +

93

Depth

1171 fms

Shot or lead

36 lbs.

Bottom

fine gy S. &amp; N.

Bottom temperature

36

No. of thermometer

98336

Cor.

— 0

Corrected temperature

36.0

(Jr 810 W)

Air

75

Surface

76

Drift

2 5/10'

Trawl or dredge

5 1/2 Blake

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

6-14.50	21.45		6-37.25	11.10
05.30	28.35	100	40.35	11.40
06.25	27.30	200	43.50	11.0
07.15	26.20	300	47.10	07.30
08.00	25.15	400	50.25	0.00
09.05	24.0	500	54.20	4.00
10.05	22.50	600	56.50	57.00
11.0	21.35	700	59.50	15.10
12.00	20.60	800	7-02.30	10.00
13.10	19.0	900	05.00	49.00
14.10	17.45	1000	08.00	0.00
15.00	16.30	1078	11.20	0.00
		1100	14.45	0.00
		1200	18.30	0.00
		1300	21.00	09.05
		1400	24.20	0.00
		1500	26.55	0.00
		1600	29.30	17.00
		1700	32.50	13.40
		1800	37.10	08.30
		1900	42.25	8:02.30
		2000		
		2100		
		2200		
		2300		
		2400		

Makunohiki Id., 85°20'30"W., 24°10'

		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
4310	305	3400	
1078	112	3500	
		3600	
3232	93	3700	
	1078	3800	
	1171	3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Net 500 ft.

No.

Date

Machine

Reel

Turns

Cor. +

Depth

Shot or lead

Bottom

Bottom temperature

No. of thermometer

Cor.

Corrected temperature

Air

Surface

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

12.00	7.54.20	0	
12.15	7.54.30	100	
12.30	7.54.40	200	
12.45	7.54.50	300	
13.00	7.55.00	400	
13.15	7.55.10	500	
13.30	7.55.20	600	
13.45	7.55.30	700	
14.00	7.55.40	800	
14.15	7.55.50	900	
14.30	7.56.00	1000	
14.45	7.56.10	1100	
15.00	7.56.20	1200	
15.15	7.56.30	1300	
15.30	7.56.40	1400	
15.45	7.56.50	1500	
16.00	7.57.00	1600	
16.15	7.57.10	1700	
16.30	7.57.20	1800	
16.45	7.57.30	1900	
17.00	7.57.40	2000	
17.15	7.57.50	2100	
17.30	7.58.00	2200	
17.45	7.58.10	2300	
18.00	7.58.20	2400	

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 14094 Date 25 July 1902  
Machine. Reel.  
Turns 692 Cor. + 60 Depth 753  
Shot or lead 60  
Bottom h. n. p. s. 382  
Bottom temperature  
No. of thermometer 98236 Cor. - 0  
Corrected temperature 38.0  
Air 80 Surface 76 Drift 1 3.0  
Trawl or dredge 57 Blake

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
10.20.15	41.20	0	10.48.00	2.55.20
21.00	44.20	100	52.15	18.00
22.00	45.10	200	56.10	44.30
23.10	47.10	300	11.00.00	45.45
33.50	41.00	400	03.50	37.-
34.40	39.40	500	07.40	32.45
35.40	38.40	600	11.00	30.-
36.20	37.10	700	14.40	26.10
		800	18.20	22.00
		900	22.40	17.45
		1000	26.30	12.10
		1100	30.40	08.50
		1200	35.15	12.03.20
		1300		58.20
		1400		11.55.50
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Atlantic Ocean, 30° 30' N., 85° 10' W., 207/10'

10  
11  
12

4310  
217  
3618

201  
144  
61  
692  
-153

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

7. ... REMARKS: ...

No. *Hy. 4602*. Date *22 July, '02*.*Sigsbee* Machine. / Reel. *(Moby)*Turns *722* Cor. + *64* Depth *786 fms.*Shot or lead *35 lbs.*Bottom *fm. S. M. S. M.*Bottom temperature *37.5*No. of thermometer *91236* Cor. *0*Corrected temperature *37.5*Air *78°* - Surface *76°* - Drift~~Trawl or dredge~~

P.m. SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>12.55.</i>	<i>1.10.15</i>	0		
<i>55.50</i>	<i>09.15</i>	100		
<i>56.35</i>	<i>08.20</i>	200		
<i>57.25</i>	<i>07.20</i>	300		
<i>58.15</i>	<i>06.20</i>	400		
<i>59.15</i>	<i>05.20</i>	500		
<i>1.00.20</i>	<i>04.15</i>	600		
<i>01.25</i>	<i>03.10</i>	700		
<i>01.40</i>	<i>03.-</i>	720		
		800		
		900		
<i>Also marks end</i>		1000		
<i>02</i>		1100		
<i>Dr. 4094.</i>		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Make small: 2000 844071, 11 10.

62  
11/10

4210  
778  
3587

305  
140  
64  
728  
88

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. Δ. 4095. Date 21 July '02.Sigsbee Machine. 1 Reel.Turns 264 Cor. + 26 Depth 290 fms.~~Shot or lead~~ 36 Lbs.Bottom h. M. fm. S. Glob.Bottom temperature 44.1No. of thermometer 98236 Cor.Corrected temperature 43.9Air 70° - Surface 70° - Drift N 22° W  
1 1/10'Trawl or dredge 8' Tanner, and

## SOUNDING WIRE.

## DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
2.19.50	2.26.-	0	2.33.-	3.45.00
20.20	25.-	100	37-40	41-10
21.15	26.-	200	41-40	37-40
22.40	27.10	300	46-17	31-50
		400	51-30	27-00
		500	56-50	22-00
		550	59-20	19-20
		575	3-08-50	
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhooniki Isld. S 61° N., 10 6/10"

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
3600	3600	
3700	3700	
3800	3800	
3900	3900	
4000	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *4603* Date *July 22*Machine. *Reel*Turns *260* Cor. + *26* Depth *286 fms*Shot or lead *36*Bottom *fine S. for*Bottom temperature *44.1*No. of thermometer *75236* Cor. *-0.2*Corrected temperature *43.9*Air *80* Surface *77* Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

<i>57.10</i>	<i>57.10</i>	0	
<i>57.50</i>	<i>57.50</i>	100	
<i>54.50</i>	<i>54.50</i>	200	
<i>54.10</i>	<i>54.10</i>	300	
		400	
		500	
		600	
		700	
		800	
		900	
		1000	
		1100	
		1200	
		1300	
		1400	
		1500	
		1600	
		1700	
		1800	
		1900	
		2000	
		2100	
		2200	
		2300	
		2400	

Mokuhoniki Del., 854°N., 14.0'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
4310	3500	205
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

(8) Lat Log 85.6

No. *D 4096* Date *July 22*

Machine *#1* Reel *Star*

Turns *247* Cor. + *25*

Depth *272 fms*

Shot or lead *36 lbs*

Bottom *gy. m. gy. s.*

Bottom temperature *45.5*

No. of thermometer *75336*

Cor. *-0.2*

Corrected temperature *45.3*

Air *78* Surface *77*

Drift *(N 12° E 1.7)*

Trawl or dredge *10' Blake 60' fine M.*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

<i>5-14.15</i>	<i>18.50</i>	0	<i>5-25.30</i>	<i>25.10</i>
<i>14.45</i>	<i>18.40</i>	100	<i>31.11</i>	<i>21.10</i>
<i>15.30</i>	<i>17.25</i>	200	<i>34.05</i>	<i>17.50</i>
<i>16 =</i>	<i>16.55</i>	300	<i>37.51</i>	<i>16.25</i>
		400	<i>41.2</i>	<i>09.50</i>
		<i>450</i>	<i>43.10</i>	
		<i>500</i>	<i>59.00</i>	<i>67.12.50</i>
		<i>475</i>		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhooniki Delit, S 77° 30' W, 7.0'

		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
4310	205	3400	
		3500	
		3600	
		3700	
		3800	
		3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *15 4097* Date *July 22*  
*Sigsbee* Machine. # *1* Reel. *Heavy*  
 Turns *260* Cor. + *26* Depth *286 fms*  
 Shot or lead *36#*  
 Bottom *White S. gy S*  
 Bottom temperature *44.4*  
 No. of thermometer *78236* Cor. *-0.2*  
 Corrected temperature *44.2* (*N 17.5*)  
 Air *78* Surface *77* Drift *1 1/2'*  
 Trawl or dredge *10' Blake 60' S. W.*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>6-27.40</i>	<i>23.20</i>	0	<i>6-41.50</i>	<i>8.01.30</i>
<i>28.25</i>	<i>22.15</i>	100	<i>46.30</i>	<i>57 =</i>
<i>29.05</i>	<i>31.10</i>	200	<i>50.50</i>	<i>52.30</i>
<i>29.35</i>	<i>30.30</i>	<i>260</i>	<i>54.45</i>	<i>48.10</i>
		300	<i>58.50</i>	<i>43.40</i>
		400	<i>7-03.10</i>	<i>39.35</i>
<i>Marks and 7</i>	<i>f</i>	500	<i>* 09 =</i>	
<i>15 4096</i>		<i>550</i>	<i>23.10</i>	<i>34.10</i>
		<i>600</i>	<i>22.50</i>	<i>31.50</i>
		900		
		1000	<i>23. Min</i>	
		1100		
		1200	<i>* Supplied in 10</i>	
		1300	<i>in 10 min</i>	
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhooniki Islet, 867° 15' N, 8.0'

		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
		3400	
4310	205	3500	
		3600	
		3700	
		3800	
		3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Source at 2500

No. *4604* Date *July 32<sup>nd</sup>*  
 Machine. *Sigsbee* Reel. *Hand*  
 Turns *260* Cor. + *26* Depth *286 f*  
~~Shot or lead~~ *36 lb.*  
 Bottom *M. W. 440*  
 Bottom temperature  
 No. of thermometer *98236* Cor. *-0.2*  
 Corrected temperature *43.8*  
 Air *77* Surface *77* Drift  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>8 02.15</i>	<i>08.40</i>	0		
<i>03.00</i>	<i>07.35</i>	100		
<i>03.55</i>	<i>06.35</i>	200		
<i>04.35</i>	<i>05.50</i>	<del>300</del>		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhooniki Det., 861° 30' N., 82°

		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
4310	205	3400	
		3500	
		3600	
		3700	
		3800	
		3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4098 *51* Date *July 11, 1902*  
 Machine. *1* Reel. *3*  
 Turns *86* Cor. + *36* Depth *95 fms.*  
 Shot or lead *36*  
 Bottom *Co. S gy. m. sh.*  
 Bottom temperature *61.2*  
 No. of thermometer *78226* Cor. *-0.2*  
 Corrected temperature *64.8* (*N 21° W.*)  
 Air *78* Surface *76* Drift *2.0'*  
 Trawl or dredge *10' X 13' 0" beam*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

DREDGE ROPE.

DOWN.

UP.

<i>9.15.00</i>	<i>9.15.00</i>	<i>78</i>	<i>10.00.50</i>	<i>10.00.00</i>
<i>57.40</i>	<i>10.00.20</i>	<i>200</i>	<i>09.20</i>	<i>11.10</i>
		<i>200</i>	<i>13.00</i>	<i>2.15</i>
		<i>200</i>	<i>14.00</i>	<i>10.35.00</i>
		<i>400</i>		
		<i>500</i>		
		<i>600</i>		
		<i>700</i>		
		<i>800</i>		
		<i>900</i>		
		<i>1000</i>		
		<i>1100</i>		
		<i>1200</i>		
		<i>1300</i>		
		<i>1400</i>		
		<i>1500</i>		
		<i>1600</i>		
		<i>1700</i>		
		<i>1800</i>		
		<i>1900</i>		
		<i>2000</i>		
		<i>2100</i>		
		<i>2200</i>		
		<i>2300</i>		
		<i>2400</i>		

North Coast of Main Id-  
Puniawa Point, S 52° 30' E., 6 5/10!

OK  
1000  
in

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Not enough time

*Station*

No. 4099 Date 22 July 07  
Machine. 1 Reel. 1  
Turns 138 Cor. + 14 Depth 152 fms

Shot or lead 61 lb  
Bottom m. s. 16 fms  
Bottom temperature  
No. of thermometer 98236 Cor. -0.3  
Corrected temperature 60.7° (68.5° W)  
Air 79 Surface 76 Drift 18/10  
Trawl or dredge 8 ft. Tanner.

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
10.47.30	10.51.15	0	11.00.00	11.34.30
48.30	50.50	100	11.11.00	42.00
10.49.00	10.50.10	138	12.45.00	38.00
		200	14.00.00	
		220	19.10.00	
		270		
		400		
		500		
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

*W. H. Wood*  
*4099*

Pinnawant, 28, 8<sup>3</sup>/<sub>10</sub>'

OK  
H2O.  
138  
14  
152

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *H. 4605* Date *23 July '02*

Machine. *1* Reel. *1*

Turns *179* Cor. + *14* Depth *193*

Shot or lead *36 Lbs.*

Bottom *gy S. For.*

Bottom temperature *60.9*

No. of thermometer *98236* Cor. *-0.3*

Corrected temperature *60.6*

Air *78°* Surface *76°* Drift

Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>11.48.55</i>	<i>11.52.50</i>	0		
<i>49.55</i>	<i>51.50</i>	100		
<i>11.50.55</i>	<i>11.51.25</i>	<i>179</i>		
		<del>200</del>		
		300		
		400		
<i>Bottom</i>		500		
		600		
<i>4099</i>		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Punicawa Point, 853° E., 4 5/10

OK  
H.A.  
2

130  
130  
130

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Dr 4100*. Date *23 July '02*.*Sigsbee* Machine. / Reel. / *Nach*.Turns *118* Cor. + *12* Depth *130 fms.*Shot or lead *36 lbs.*Bottom *co s. sh. for.*Bottom temperature *61.3*No. of thermometer *98236* Cor. *-0.5*Corrected temperature *61.0* (N) *17.8*Air *80* Surface *75* - Drift *1 2/10*Trawl or dredge *8*

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
<i>1.51.55</i>	<i>1.55.05</i>	<i>0</i>	<i>1.57.10</i>	<i>2.00.20</i>
<i>52.40</i>	<i>54.05</i>	<i>100</i>	<i>2.04.10</i>	<i>2.05.00</i>
<i>1.52.50</i>	<i>1.53.55</i>	<i>118</i>	<i>08.30</i>	<i>25.00</i>
		<i>200</i>		
		<i>250</i>		
		<i>300</i>		
		<i>400</i>		
		<i>500</i>		
		<i>600</i>		
		<i>700</i>		
		<i>800</i>		
		<i>900</i>		
		<i>1000</i>		
		<i>1100</i>		
		<i>1200</i>		
		<i>1300</i>		
		<i>1400</i>		
		<i>1500</i>		
		<i>1600</i>		
		<i>1700</i>		
		<i>1800</i>		
		<i>1900</i>		
		<i>2000</i>		
		<i>2100</i>		
		<i>2200</i>		
		<i>2300</i>		
		<i>2400</i>		

Paildo Channel  
 N 35° W, 3' 10'

5  
 11

118  
 119  
 120

2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *Hy. 4606*, Date *22 July '02*.Machine. / Reel. *No. 1*Turns *137* Cor. + *14* Depth *151 fms.*Shot or lead *36 Lbs.*Bottom *co. S. Sh. For.*Bottom temperature *59.2*No. of thermometer *98236* Cor. *-0.3*Corrected temperature *58.9*Air *79°* Surface *76°* Drift

Trawl or dredge

## P.M. SOUNDING WIRE.

## DREDGE ROPE.

DOWN.	UP.	TURNS.	DOWN.	UP.
<i>2.45.00</i>	<i>2.49.20</i>	0		
<i>4.00</i>	<i>48.00</i>	100		
<i>2.47.00</i>	<i>2.48.00</i>	137		
		200		
		300		
<i>Also marks and</i>		400		
<i>at</i>		500		
<i>Dr. 4/00.</i>		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhoonika 1157° 30' N., 2

OK  
H.A.  
2

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

P.L. = 28.4

No. 4101. Date 23 Aug 02

Machine. Reel.

Turns 120 Cor. + 13 Depth 133 fms

Shot or lead 36 Lbs.

Bottom co S. Sh. For.

Bottom temperature 60. -

No. of thermometer 98236. Cor. -0.3

Corrected temperature 59.7 (8890W)

Air 79. - Surface 8. - Drift 1 1/10'

Trawl or dredge 10' B. & B. dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
3.38.30	3.42.30	0	3.42.30	1.30
39.00	41.25	100	52.10	37.50
2.30.10	2.41.00	150	50.10	34.10
		200	47.10	29.40
		250	44.10	
		300	41.10	
		350	38.10	
		400	06.10	10.40
		500		
		600		
		700	21.10	
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuhooniki Islet, N 80 30' E, 4 <sup>8</sup>/<sub>16</sub>'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
130	3700	
142	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Course S. N. x N.

No.

H102

Date

July 33

Machine #1

Reel.

Kary.

Turns 111

Cor. +

11

Depth

132 fms

Shot or lead

36 lbs.

Bottom

fine gy. s. for

Bottom temperature

5.00. did not trip

No. of thermometer

98236

Cor.

Corrected temperature

Air

78

Surface

79

Drift

S 51° W  
13' 10"

Trawl or dredge

10'

Beck 6' 5" 14

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

4-42.30

45.30

0

456.50

41.30

43.20

44.20

100

5-01.50

27.40

43.25

200

05.05

23.10

Main and 8

300

07.20

5.00.00

H101

400

20.00

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Mokuhooniki Islet, N. 29° E, 5 <sup>6</sup>/<sub>10</sub>'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Current S.W. (S.W.C.)

No. *S* 4103 Date *July 26*Machine. #1 Reel. *Hand*Turns *120* Cor. + *12*Depth *132 fms*Shot or lead *36 lbs*Bottom *gy. s.*Bottom temperature *61.7*No. of thermometer *98236*Cor. *0.3 W*Corrected temperature *61.7*Air *77* Surface *78*Drift *1.5'*Trawl or dredge *0' Blake, 60 lbs. 7'.*

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

*5-43.20* *46.50**44.15* *45.30**44.30* *45.10**Marks end of**S 4102*

100

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

*5-54.10**58.30**6-02.40**06.05**21.7**40.05**36.20**32.20**27.10*

Mokuhoonaki Islet, N 25 15' E, 6 15'

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Surface S.W. 7.50

No. *54104* Date *Aug 23<sup>d</sup>*

Machine # *1* Reel *Heavy*

Turns *128* Cor. + *13* Depth *141 fms*

Shot or lead *36 lbs*

Bottom *fine gy. S. For*

Bottom temperature *61.70*

No. of thermometer *75236* Cor. *-0.3*

Corrected temperature *60.8* (*52.450*)

Air *77* Surface *78* Drift *8.5 N 10*

Trawl or dredge *10' Blake, 60' S. R.*

SOUNDING WIRE.

DREDGE ROPE.

DOWN.

UP.

TURNS.

DOWN.

UP.

<i>43.40</i>	<i>46.15</i>	0	<i>6:56.10</i>	<i>37.10</i>
<i>43.20</i>	<i>46.15</i>	100	<i>7:01.10</i>	<i>33.20</i>
<i>43.25</i>	<i>46.26</i>	<i>128</i>	<i>15.10</i>	<i>29.56</i>
		<i>150</i>	<i>07.30</i>	<i>27.05</i>
		400		
		500	<i>20 min</i>	
		600		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Mokuauia Islet, N 38°15' E, 8 <sup>1</sup>/<sub>10</sub>'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

Current N. S. N. 1

No.

44607

Date

Machine.

Reel.

Turns

112

Cor. +

11

Depth

123

Shot or lead

36 lbs.

Bottom

fine gy. S. For

Bottom temperature

61.0

No. of thermometer

98236

Cor.

-0.3

Corrected temperature

60.7

Air

77

Surface

77

Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

7-39.20

42.30

40.05

41.15

40.15

41.10

0

100

112

200

300

400

500

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Makubonaki Island, N 42° 30' E, 7.10

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
	3600	
	3700	
	3800	
	3900	
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4105 Date 24 July 02  
 Machine. 1 Reel. 1  
 Turns. 314 Cor. + 29 Depth 314  
 Shot or lead 35 lb

Bottom fine co. S. Fr. 449  
 Bottom temperature  
 No. of thermometer 98236 Cor. -0.2  
 Corrected temperature 43.8  
 Air 76 Surface 76 Drift 1 1/2 10  
 Trawl or dredge

SOUNDING WIRE.		TURNS.	DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
5.09, 40	16.20	0	5.30.00	
10.20	15.10	100	32.10	31.20
11.45	14.10	200	35.10	31.30
	13.10	285	4.10	17.20
		400	45.30	
		500		1.10
		600		1.20
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Kaiuri Channel -  
 Lee-o Ka Laau Light,  $845^{\circ}30' E$ ,  $10\frac{6}{10}'$

280

2410 220

240 1

240 29

240 4

2500  
 2600  
 2700  
 2800  
 2900  
 3000  
 3100  
 3200  
 3300  
 3400  
 3500  
 3600  
 3700  
 3800  
 3900  
 4000

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. 4106

Date

Machine.

Reel.

Turns 304 Cor. +

Depth 335 fms.

Shot or lead 36 lb

Bottom fine s.

Bottom temperature

No. of thermometer 91206

Cor. -0.2

Corrected temperature 42.6

Air 76

Surface 76

Drift 1 1/2

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

30	40.20	0	46.00	2.00
33	39.20	100	48.00	4.00
37	37.10	200	52.41	14.00
40	35.00	300	57.20	25.00
43	32.50	304	60.00	30.00
		400	7.00.00	
		500	03.00	22.00
		600	07.30	1,27.00
		700		
		800	20	
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Laurel Ka Laew Light, 46°15' E, 11<sup>S</sup>/10

OK  
HOB.  
/

2500  
2600  
2700  
2800  
2900  
3000  
3100  
3200  
3300  
3400  
3500  
3600  
3700  
3800  
3900  
4000

1 1/2 200  
300 175  
600 3'

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *50115* Date *11/1/1912*

*Digital* Machine. 1 Reel.

Turns *319* Cor. + *31* Depth *350 fms.*

Shot or lead *36 lbs.*

Bottom *co S. For.*

Bottom temperature *41.6*

No. of thermometer *98236* Cor. - *0*

Corrected temperature *41.6* (*N 13° E*)

Air *78°* - Surface *76°* - Drift *1.0'*

Trawl or dredge *10' Blake, 60 lbs. trawl*

SOUNDING WIRE.

DOWN.

UP.

TURNS.

*A. W.* DREDGE ROPE.

DOWN.

UP.

*7.53.40* *8.01.25*

0

*8.05.-* *8.57.-*

*54.15* *8.00.30*

100

*09.40* *53.15*

*55.-* *79.20*

200

*13.10* *49.40*

*55.50* *58.10*

300

*16.30* *46.05*

*7.56.05* *7.58.00*

*319*  
400

*20.15* *43.10*

*also marks and*

500

*24.30* *38.10*

600

*Dr. 4106.*

700

*6 Min.*

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

Lae-o Ka Laaw Light, S 34° 30' E, 12 <sup>3</sup>/<sub>10</sub>'

	2500	
	2600	
	2700	
	2800	
	2900	
	3000	
	3100	
	3200	
	3300	
	3400	
	3500	
200	3600	200
170	3700	170
370	3800	370
250	3900	250
	4000	

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. *H. 468* Date *24 Feb 02*Machine *W. & A. Reel*Turns *322* Cor. + *32* Depth *354*Shot or lead *36 Lbs.*Bottom *Co. Fr. S.*Bottom temperature *41. -*No. of thermometer *2110* Cor. *- 0*Corrected temperature *41.0*Air *79.°* - Surface *76.°* - Drift

Trawl or dredge

## SOUNDING WIRE.

DOWN.

UP.

## TURNS.

## DREDGE ROPE.

DOWN.

UP.

*0. 0. 10 4. 0. 0. 0*

0

*00. 0. 0. 0 06. 10*

100

*01. 0. 0. 0 05. 05*

200

*02. 0. 0. 0 04. 00*

300

*03. 0. 0. 0 03. 00*

400

500

*Also 1000 and*

600

700

800

900

1000

1100

1200

1300

1400

1500

1600

1700

1800

1900

2000

2100

2200

2300

2400

No. Pac-o Ka. Laju Light, <del>8.13</del>		S 31° E, 13.0	
		2500	
		2600	
		2700	
		2800	
		2900	
		3000	
		3100	
		3200	
		3300	
		3400	
		3500	
1/310	20	3600	
523	178	3700	
5987	32	3800	
	23	3900	
		4000	

SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

No. Dr. 4108 Date 24 July, 02.Sigsbee Machine. # 1 Reel. Navy.Turns 375 Cor. + 36 Depth 411 fms.Shot or lead 36 lbs.Bottom Co. For.Bottom temperature 50.0No. of thermometer 91236 Cor. -0Corrected temperature 40.4 (51.5)Air 79° - Surface 76° - Drift 1 1/10'Trawl or dredge 8'

## SOUNDING WIRE.

DOWN.

UP.

TURNS.

## DREDGE ROPE.

DOWN.

UP.

9.40.25	9.48.10	0	9.52.30	11.00.00
41.05	47.10	100	56.10	56.00
42.55	45.10	200	59.30	51.30
43.40	45.15	300	10.03.-	47.30
44.-	9.44.30	375	06.-	41.35
		400		
		500	09.30	37.10
		550	12.30	
		600	10.22.-	10.32.45
		700		
		800	20 min.	
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

Sae-oka Laaw light, 821° E, 15 5/8'

2500

2600

2700

2800

2900

3000

3100

3200

3300

3400

3500

3600

3700

3800

3900

4000

# SERIAL TEMPERATURES.

DEPTH.	TEMP.	NO. OF THER.	COR.	COR. TEMP.
25				
50				
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				

REMARKS:

*Am. Fish. Station*  
 Dr. 4109. Date 24 July '02.  
 Sigsbee Machine. 1 Reel. *Tracy*.  
 Turns 403 Cor. + 39 Depth 442 fms.  
 Shot or lead 36 Lbs.  
 Bottom Co. For. S.

Bottom temperature 40.4

No. of thermometer 98236 Cor. -0

Corrected temperature 40.4

Air 79° - Surface 76° - Drift { N 28° W  
 17/10'

Trawl or dredge 8' Tanner with apron.

A. III. SOUNDING WIRE.		TURNS.	A. VI. DREDGE ROPE.	
DOWN.	UP.		DOWN.	UP.
11.02.30	11.11.25	0	11.15.30	30.15
03.10	10.20	100	19.20	26.20
03.55	09.20	200	23.00	22.00
04.45	08.30	300	26.55	17.35
11.05.40	11.07.15	400	31.00	13.30
		403	34.35	09.20
		500	38.40	04.45
		600	41.40	12.01.15
		680		
		700		
		800		
		900		
		1000		
		1100		
		1200		
		1300		
		1400		
		1500		
		1600		
		1700		
		1800		
		1900		
		2000		
		2100		
		2200		
		2300		
		2400		

also marks end  
 of

Dr. 4108.)

20 min

See-o Ka Laan Light, S 23° 45' E, 17.0'

OK  
HOF.  
3

$$\begin{array}{r} 4310 \\ 403 \\ \hline 3907 \end{array} \quad \begin{array}{r} 2'05 \\ 166 \\ \hline 39 \\ 405 \\ \hline 442 \end{array}$$

11. 31. 40

63 fms - 34. -

75. - 36. 30